

7 ALTERNATIVES

7.1 CEQA REQUIREMENTS

Guiding principles for the alternatives analysis are provided by the State CEQA Guidelines Section 15126.6. These principles indicate that the alternatives analysis must: (1) describe a range of reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project; (2) consider alternatives that could reduce or eliminate any significant environmental impacts of the proposed project, including alternatives that may be more costly or could otherwise impede the project's objectives; and (3) evaluate the comparative merits of the alternatives. The range of reasonable alternatives must be selected and discussed in a manner that fosters meaningful public participation and informed decision making (State CEQA Guidelines Section 15126.6[f]).

The alternatives analysis in this DEIR is governed by the "rule of reason" in accordance with Section 15126.6(f) of the State CEQA Guidelines. That is, the range of alternatives presented in this document is limited to those that permit for a reasoned choice by State Parks. In addition to the guiding principles for the selection of alternatives as set forth above, Section 15126.6 of the State CEQA Guidelines requires that an EIR: (1) evaluate a no project alternative, (2) identify alternatives that were originally considered but then rejected from further evaluation, and (3) identify the environmentally superior alternative.

Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects (State CEQA Guidelines Section 15126.6[c]). Lead agencies are guided by the general definition of feasibility found in CEQA: "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (State CEQA Guidelines Section 15364)."

A description of the project alternatives, including the no project alternative, is provided in this DEIR to allow for a meaningful evaluation, analysis, and comparison of these alternatives with the proposed project alternative, which is the habitat restoration and outdoor recreation facility development project on two parcels known as the Singh Unit and Nicolaus property, as described in Chapter 3, "Description of the Proposed Project."

7.2 PROJECT GOALS AND OBJECTIVES

As described above, one of the key factors in considering alternatives is whether they can feasibly attain most of the basic objectives of the project. Section 3.1.2 of this DEIR describes the project objectives for the proposed project. These objectives are listed again below:

HABITAT RESTORATION

The first project objective is to restore natural topography and native vegetation on the Singh Unit and Nicolaus property. This includes the removal of two human made berms on the Singh Unit; the removal of nonnative invasive vegetation, including eucalyptus on the Singh Unit adjacent to River Road; and, restoration of the following natural communities on both parcels: cottonwood riparian forest, valley oak savannah, valley oak forest, mixed riparian forest, native grassland, and valley oak riparian forest. The restoration activities proposed for this project have four central objectives, which are aligned with the California Bay-Delta Authority's Ecosystem Restoration Program (ERP) Goals:

1. Improve the ecological health and long-term viability of at-risk species and communities at a critical confluence area by protecting and restoring riparian habitat and rehabilitating floodplain processes through horticultural and process-based restoration (ERP Goal 1).

2. Increase knowledge of ecosystem function and employ adaptive management to improve the ability to engineer “desired future conditions” for riparian restoration projects that focus on lowland tributary confluence areas (ERP Goal 2).
3. Reduce flood damage to important human infrastructure by increasing the storage of floodwaters in the project area (ERP Goal 4).
4. Improve water quality to benefit humans and wildlife through the restoration of riparian vegetation communities, and geomorphic and hydrologic processes (ERP Goal 6).

OUTDOOR RECREATION FACILITIES DEVELOPMENT

The second project objective is to increase public access and outdoor recreation opportunities at BSRSP. The outdoor recreation facilities development component of this project has four key objectives:

- ▶ Develop potential new outdoor recreational use opportunities (day-use and overnight camping).
- ▶ Relocate the BSRSP headquarters and maintenance area to the existing Nicolaus property farm buildings and surrounding site where frequency of flooding is decreased.
- ▶ Convert the abandoned BSRSP headquarters and maintenance area to a trailhead with parking, picnic facilities, restrooms and interpretive signs.
- ▶ Install trails that connect to existing and proposed trails in the BSRSP’s Chico Landing Subunit, Indian Fisheries Subunit, and Big Chico Creek Riparian Area Subunit; and the Department of Fish and Game’s (DFG) Pine Creek Unit at Allinger Ranch.

7.3 ALTERNATIVES EVALUATED

7.3.1 ALTERNATIVE 1—NO PROJECT

DESCRIPTION

The no project alternative represents perpetuation of existing agricultural land uses on the Singh Unit and the Nicolaus property. The analysis of this alternative is based on the physical conditions that are likely to occur in the future if the proposed project (the active habitat restoration and development of recreation facilities) is not approved and implemented. Under this alternative the Nicolaus property would not be transferred from TNC to State Parks, riparian habitat would not be restored and no recreation facilities would be constructed on the Singh Unit or the Nicolaus property, and the existing walnut and almond orchards would remain in active production.

EVALUATION

No direct effects would occur, either positive or negative, under the no project alternative. Because there would be no effort to restore riparian habitat, there would be no benefits to sensitive and common native wildlife populations and no increase in habitat values. It is expected that the project site would remain in orchards and would continue to flood periodically. Under this alternative, there would be no air quality, noise, or traffic impacts associated with construction of the proposed project. However, continued operation of the orchards would result in continued environmental effects related to agricultural activities (air emissions, hazardous materials, noise, traffic, water quality, etc.). In addition, the no project alternative would not meet the project objective to restore natural topography and native communities nor the project objective to increase public access and outdoor recreation opportunities at BSRSP.

7.3.2 ALTERNATIVE 2—PASSIVE RESTORATION

DESCRIPTION

Under the passive restoration alternative, the project site would not be actively restored and enhanced, but agricultural activities would cease. The orchards on the Singh Unit and the Nicolaus property would be removed, but the lands would not be actively planted with native riparian vegetation. This alternative would rely on natural recruitment from adjacent riparian communities to recolonize the project site, and on current hydrological conditions to sustain establishing seedlings. A weed control program could be implemented as part of the passive restoration alternative.

No public access or recreational facilities would be constructed under this alternative. The Nicolaus property would still be transferred to State Parks and would become part of BSRSP. However, there would be no developed public access or recreational facilities such as trails, parking areas, campgrounds, or restrooms provided on the Singh Unit or Nicolaus property. Any public use of these areas would be day-use only because no camp sites would be developed. The existing Park headquarters would not be relocated and would continue to be operated at its current location in the Indian Fishery subunit. The existing farm buildings on the Nicolaus property would remain and would likely be used by State Parks for storage and maintenance.

Analysis of this alternative is based on the physical conditions that are likely to occur in the future if active habitat restoration practices and recreational facilities development are not implemented but current land use practices are abandoned to allow natural processes to reclaim the land at the project site.

EVALUATION

The passive restoration alternative would result in the same change in land use from agricultural to riparian habitat that would occur under the proposed project. Like the proposed project, this alternative would not result in conversion of agricultural land to urban uses and would therefore not result in a loss of farmland as a resource, significant damage to soil values of the resource, or detract from the agricultural land values. However, because the project site would revegetate by natural recruitment, this alternative would not provide the grassland buffers and maintenance of the restored habitat that would help minimize indirect effects and land use conflicts with adjacent private agricultural lands (e.g., pests).

Aesthetically, this alternative would have a detrimental impact due to the removal of the orchards without the active planting of new riparian vegetation. The project site would remain unvegetated for a longer period of time than the proposed project due to reliance on natural recruitment and the lack of active irrigation and maintenance to establish new vegetation.

It is unlikely that the passive restoration alternative would meet the habitat restoration goals of the project (Peterson 2002). This alternative would require a much longer timeframe for the establishment of riparian habitat that would have real value to wildlife. In addition, wildlife habitat value is likely to be lower than is expected with the proposed project because it would likely include a significant amount of nonnative invasive species, and natural recruitment of native species would be lower than with active planting. As such, this alternative would not provide a short-term increase in wildlife habitat value and the long-term habitat values would be diminished in comparison with the proposed project. The flood storage and water quality benefits of this alternative would be similar to the proposed project.

Because this alternative would not involve earth-moving activities for restoration and recreation facilities development, it would avoid any potential construction-related air quality, noise, traffic, and water quality impacts. The lack of recreational facilities would also result in the avoidance of any operational air quality, noise, traffic, and water quality impacts. However, this alternative would not meet the outdoor recreation facilities

development objectives of the project because, although the project site would become part of BSRSP, no day-use or overnight camping facilities would be developed and the Park headquarters would not be relocated.

7.2.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. State CEQA Guidelines Section 15126.6(d)(2) state that if the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. Alternatives considered in this DEIR include the proposed project, the no project alternative, and the passive restoration alternative.

The no project alternative would not meet the project objectives to restore natural topography and native vegetation or increase public access and outdoor recreation opportunities at BSRSP and would not provide the biological benefits that would be provided by the other two alternatives.

The proposed project is the environmentally superior alternative of the alternatives considered. Under the proposed project, native species would be planted and actively maintained for 3 years to allow the planted vegetation to become established. The planned maintenance program includes irrigation and weed control to allow root systems to mature to the depth of the water table and to eliminate or control weeds that could interfere with the establishment of native plants. The proposed project would provide the best balance between avoiding environmental impacts and obtaining the project objectives. No significant increases in flood risks would result from any of the alternatives considered. Although some impacts associated with the proposed project would be avoided by the passive restoration alternative, those impacts would be reduced to a less-than-significant level under the proposed project with the incorporation of mitigation. In addition, the proposed project would provide greater benefits to biological and recreational resources than the no project or passive relocation alternatives.

7.2.4 ALTERNATIVES CONSIDERED AND ELIMINATED FROM DETAILED EVALUATION

During the planning stages of the proposed project, an alternative was considered that was identical to the proposed project, except that the habitat restoration plan for the Singh Unit included mixed riparian forest in the area of the existing/historic swale. The swale runs north-south along the western portion of the Singh property, and historically transferred water from the lands to the north to the south to Big Chico Creek near its confluence with Mud Creek. This alternative of mixed riparian forest in the area of the swale was considered to reduce water velocities and erosion through the private property to the north and through the project site. However, the landowners of the private property to the north of the Singh Unit expressed concerns during the scoping period regarding the forested vegetation and the potential to back-up water and sediment onto their property. In response to these concerns, TNC re-designed the Singh Unit restoration plans to provide a flowthrough meadow along the swale and re-modeled the restoration plans. The modeling determined that there would be flow velocity increases of up to 1.75 feet per second within the swale, but that the proposed changes would not be expected to substantially alter sediment transport and deposition within the project area. Therefore, the meadow flowthrough area was maintained in the proposed project (see Chapter 3 and Appendix C) and the restoration plan with mixed riparian forest habitat in the swale was eliminated from further consideration.